

Remarks

Applicants thank Examiners Greenhut and Lillis for the opportunity to discuss this application during the interview of November 21, 2006. Agreement was reached that the claims would be amended "to include two robots each facing two different respective entrances in order to overcome references of record." The amendments to the independent claims implement those agreed upon changes. Prompt entering of the amendment and issuance of a notice of allowance is requested. In the event the language used in applicants' amendment is deemed unsatisfactory personal contact with the undersigned attorney is encouraged.

Claims 1 – 18 and 20 – 24 are pending and reconsideration is requested.

Claim 1 has been amended to recite a work-piece transfer system having a first isolation load lock housed within a load lock housing for transferring a work-piece from a higher pressure region to a lower pressure region and back to said higher pressure region and includes first and second access openings facing said higher pressure region at different angles to allow the first load lock to be accessed from two different directions. A second isolation load lock housed within said load lock housing is positioned next to the first work-piece isolation load lock for transferring a work-piece from a higher pressure region to a lower pressure region and back to said higher pressure region and includes first and second access openings facing said higher pressure region at different angles to allow the second load lock to be accessed from two different directions.

Claim 1 also features a work-piece processing station for processing work-pieces at low pressure and a first robot for transferring work-pieces from one of said first and second work-piece isolation load locks to the work-piece processing station. Two or more other robots positioned in the higher pressure region outside the low pressure region for transferring work-pieces to and from the adjacent work-piece isolation load locks from a source of said work-pieces prior to processing and to a destination of said work-pieces after processing. Each of the two or more other robots is aligned in facing relation for moving workpieces through a specified one of said first and second access openings of a given load lock. To relate this structure to the drawings, it is noted in Figure 7 that each of the robots 146, 148 is aligned with a specified in air access opening of each of the two load locks 116, 117.

As noted during the interview of November 21, 2006, the structure of claim 1 is neither shown nor suggested in the prior art and therefore this claim is allowable. Claims 2 – 5 depend from allowable claim 1 and are also allowable.

Claim 6 features in part, two or more other robots positioned in an atmospheric region outside the low pressure region for transferring work-pieces to and from adjacent work-piece isolation load locks from a source of said work-pieces prior to processing and to a destination of said work-pieces after said processing. Each of said two or more other robots is aligned in facing relation for moving workpieces through a specified one of said first and second access openings of a given load lock.

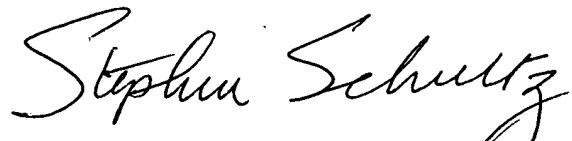
This feature of claim 6 is neither shown nor suggested in the prior art and claim 6 is allowable. Claims 7-12 depend from allowable claim 6 and are also allowable.

Claim 13 is a method claim and has been amended to feature positioning two or more in-air robots in facing relationship with a specified atmosphere access opening of the two load locks for moving workpieces into and out of said two load locks. An unprocessed work-piece is grasped with one in-air robot and moving said unprocessed work-piece into a first load lock of said two load locks through a first atmospheric load lock access opening having a facing relationship with said one in-air robot and placing the unprocessed work-piece inside the first load lock. These features of amended claim 13 are neither shown nor suggested in the prior art and therefore this claim is allowable.

Claims 14 – 24 depend from allowable claim 13 and are also allowable.

A prompt notice of allowance is solicited. The Commissioner is hereby authorized to charge any required fee under 37 C.F.R. § 1.17 in connection with this communication to our Deposit Account No. 20-090.

Respectfully submitted,



Date: Dec 5, 2006

Stephen J. Schultz
Registration No. 29, 108

Tarolli, Sundheim, Covell & Tummino LLP
Suite 1700
1300 East Ninth Street
Cleveland, Ohio 44114

Phone: (216) 621-2234
Facsimile: (216) 241-8151

Dec 5, final amendment